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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary**Application No.**

10/762,051

Applicant(s)

PARNANEN ET AL.

Examiner

Phillip H. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 May 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. This action is in response to the amendment filed 5/5/2009.
2. Claims 1-23 remain pending with claims 1-8, 17, and 21 amended.

Response to Amendment

3. The rejection to claims 20 and 21 under 35 U.S.C. 112, second paragraph in the previous action is hereby withdrawn in view of applicant's amendment.
4. The rejection to claims 1-16 under 35 U.S.C. 101 non-statutory is hereby withdrawn in view of applicant's amendment.
5. The rejection to claims 17-20 under 35 U.S.C. 101 non-statutory is maintained in view of applicant's amendment. Although, claim 17 has been amended to recited a "computer-implement" for every component of the system, however, the amendment does not overcome the 101 rejection. Applicant is suggested to add at least one hardware component e.g., a processor into the claim.
6. Examiner tried to contact the undersigned representative of the applicant, Peter Albert Jr. as requested and left him a message on July 22, 2009 hoping to clarify the office action and discuss the allowable subject matter. However, the undersigned representative did not respond.

Response to Arguments

7. Applicant's arguments filed 5/5/2009 have been fully considered but they are not deemed persuasive.

Applicant's arguments:

1. Hayton is directed to a "development" environment, where users can e.g., "develop" the appearance of the UI. Hence, Hayton fails to teach dynamically add feature to a software application.
2. The UI 42 of Hayton cannot be reasonably interpreted to read on the claimed consumer application because the UI 42 of Hayton as is supported by its description, a front-end to an application running on a server.
3. Hayton fails to teach a request is made of the property connector API 22.
4. Hayton is directed to modifying a UI 42, where the same server process/application is always associated with the UI 42. Hence, there is no need to identify a provider. Therefore, Hayton fails to disclose identifying a provider and providing a feature if the provider is identified.
5. Hayton fails to disclose storing a user interface element corresponding to the consumer application interest in a file.
6. Hayton does not suggest the existence of two applications, a consumer application and a provider application.
7. Hayton fails to teach communicating the user interface element to an application interworking framework.
8. Hayton fails to teach "generic parameter."
9. Hayton fails to teach "wherein the new consumer application integrates into the device as if part of an original group of software applications."
10. Gudmunson fails to cure the deficiencies of Hayton.

Examiner's response:

1. Hayton teaches that the user can develop the UI 42 at the client computer.

However, Hayton further teaches that the UI 42 can also be altered dynamically.

See col. 19:57-65 "A page 42 can also be altered dynamically when, for example, an iterator type predefined UI element 78 creates additional UI elements for indexed properties..." Hence, the UI 42 of Hayton can be altered by dynamically adding and/or deleting UI elements 46. If dynamically adding new UI elements to the UI 42 is considered as development time then the claimed invention is also at the development time unless the claim indicates otherwise. With regard to the independent claims 1, 8, and 17 of the present application, applicant fails to provide an explicit definition for the claimed "feature" in the specification and the claims does not clarify the "feature". The applicant's specification provides only an example of the "features" paragraph [0043]. It is reasonable to interpret the claimed "feature" as e.g., text box, text, data, value, menu command, etc., that associated with the UI application. Even assuming that the Hayton merely teaches dynamically adding data to the UI elements of the UI 42, the data added to the UI elements of the UI 42 is reasonably interpreted to read on the claimed "feature." Furthermore, Applicant's arguments are contradicted with each other. First, applicant argues that the UI 42 of Hayton is developed by the user and later argues that the UI 42 is not an actual application.

2. The UI 42 of Hayton is not a front-end to an application running on a server.

The UI 42 is a consumer application running on a client computer. In fact, col.

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10:66-67 of Hayton describe "The client process 18 produces a user-interface ("UI") 42 that is displayed to a user." Hence, the UI 42 is running on the client device and equivalent to the claimed consumer application. In addition, a front end application is a user interface application that a user sees on the screen and acts on to enter commands or to access other parts of the software application. Thus, even assuming the UI 42 of Hayton is a front-end application, the claimed consumer user interface application is also equivalent to a front-end application because it interacts directly with the user.

3. The claim does not recite that the request is generated by the application interworking framework. The limitation indicates that the request from the application interworking framework. Hence, the property connector API 22 of Hayton is an interface between the client computer and the server computer. Any request and communication is made between the client and the server must go to and from the property connector API 22. Even requesting for an UI 42 is considered as requesting for UI elements 46 because UI 42 includes UI elements 46 that the user interests.

4. The server of Hayton is identified or the information regarding the server is obtained in order to connect to the server by using the consumer interest e.g., UI elements 46. See col. 11:37-48 "The computing device can initiate execution of the property connector API 22 when the computing device downloads a page 42 containing UI elements 46 associated with property paths...In one embodiment, when the computing device initiates execution of the property connector API 22, the computing device also receives a startup argument including the name of a

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file containing the UI page 42 details, and details of the server node 60 to connect to and the application 26 to start.” Furthermore, the claim does not recite how the “provider” is identified. It is reasonable to interpret that obtaining the information regarding the server before connect to the server is equivalent to “identifying” the server.

5. The UI elements 46 of Hayton are stored at the property connector API 22, e.g., the application interworking framework. See FIG. 3 and see also col. 15:17-18 “In one embodiment, the user selects a UI element 46 from a set of predefined UI elements 78.” Hence, the UI elements 46 are stored at the application interworking framework in order to select by the user.

6. As previously indicated above, UI 42 is created at the client computer. Hence, it is not the server application e.g., application 26.

7. As explained above, the property connector API 22 of Hayton is an interface between the client and server. Any request or communication must go to and from the property connector API 22. Therefore, the UI 42, UI elements 46, and data are communicated to and from the property connector API 22 between the client and server computer for updating due to the change event to teach of the UI elements 46.

8. The claimed “generic parameter” is not a well known term in the art. The applicant’s specification provides no explicit definition of a generic parameter and the claims do not clearly describe the “generic parameter.” Hence, it is reasonable to interpret the claimed “generic parameter” as data/value or anything used by the API 22 to associate the UI 42 with the application 26. The API 22 of

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Hayton is an interface between the client and server computers used to map elements, data/values between UI 42 and the application 26. The data/values used by the API 22 for mapping are equivalent to the claimed “generic parameter.” The UI elements 46 could be interpreted as generic parameters because the claims do not make a distinction between the “generic parameter” and the “feature.”

9. The claim recites the integration step but fails to describe how the integration step is performed. Thus, it is reasonable to interpret integration of a user interface application is to create a user interface application at the client device. The UI 42 of Hayton is created at the client computer and dynamically altered to include new features (discussed above). The created UI 42 is now part of the client computer, e.g., integrate into the client computer as if part of the group of software applications running on the client computer.

10. As discussed above, Hayton teaches all the limitations as claimed by the applicant but fails to use the DLL for storing the UI elements and/or data. However, Gudmunson uses a DLL for storing components. Therefore, it is proper to combine Hayton with Gudmunson to cure the deficiency.

Claim Rejections - 35 USC § 101

8. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

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Claims 17-19 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

9. Claim 17 recites a system but it appears reasonable to interpret this system by one of ordinary skill in the art as software per se. Applicant's specification provides no explicit or deliberate definition of the components ("consumer application", "provider application", and "application interworking framework") that make up the system other than they are or could be software components, which are directed to functional descriptive material, per and are therefore non-statutory. Claims 18 and 19 directly or indirectly depend on claim 17 and therefore suffer the same deficiency.

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11. Claims 1-3 and 5-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Hayton et al. (United States Patent No. US 7,194,743 B2).

As per claim 1:

Hayton teaches a computer-implemented method for adding computer software features dynamically to a software application by establishing a framework for n

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application program interface (API) that adds a feature to an application (see at least col. 19:57-65 "A page 42 (*i.e. software application*) can also be altered dynamically when, for example, an iterator type predefined UI element 78 creates additional UI elements for indexed properties..."), the method comprising:

requesting from an application interworking framework a feature matching a consumer interest of a consumer application (see at least col. 11, lines 41-43 "the user initiates execution of the application 26 or request delivery of the page 42"; col. 17, lines 24-26 "...client node 64 requesting execution of the application 26 and/or in response to the client node 64 requesting the page 42 (UI elements 46 included in page 42)");

using the consumer interest and a feature capability to identify a provider (see at least col. 11, lines 50-52 "API 22 maps each dynamic user-interface element 46 to a property 38 of an application component 34 using the associated property path");

providing the feature, if the provider is identified, to the consumer application (see at least col. 2, lines 45-49 "user interface portion of the application can be delivered to the computer user either on the same machine on which the application is executing or on another machine remote from the machine executing the application"; col. 18, lines 57-60 "The server portion 22b transmits to the client portion 22a any change events associated with those property paths in which the client portion 22a has indicated interest"); and

utilizing the feature at the consumer application (see at least col. 18, lines 60-67 "When the event manager 74 receives a property change event...The

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event manager 74 communicates the updates due to the change event to each of the UI elements 46 mapped to the property path").

As per claims 2, 12 and 18:

Hayton further teaches

using generic parameters in application interworking framework application programming interfaces (APIs) (see at least FIG. 1; see col. 11, lines 50-52 "API 22 maps each dynamic user-interface element 46 to a property 38 of an application component 34 using the associated property path").

As per claim 3:

Hayton further teaches

wherein the application interworking framework interfaces the consumer application with the feature provider (see at least FIG. 1).

As per claim 5:

Hayton further teaches

adding a feature user interface element along with the feature (see at least FIG. 1).

As per claims 6 and 16:

Hayton further teaches

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wherein the feature user interface element comprises menu commands and a setting page or other user interface elements (see at least col. 11, lines 15-19 "The UI element 46 can be, for example, an input box for textual or numerical input and display of a value of a property...a horizontal slider for numerical...").

As per claim 7:

Hayton further teaches

wherein the application interworking framework implements two application programming interfaces (APIs), including a consumer API and a set of provider APIs, wherein the provider APIs match the desired user interface elements (see at least FIG. 1; see col. 11, lines 25-30 "property connector API 22 includes a client portion 22a and a server portion 22b. The property connector API 22, and thus the client portion 22a and the server portion 22b, is a process that is independent of the application 26").

As per claims 8 and 17:

Hayton further teaches a device that adds features dynamically to a software application such as a feature provided by a software program can be added to a software platform program for the device (see at least col. 19:57-65 "A page 42 (*i.e. software application*) can also be altered dynamically when, for example, an iterator type predefined UI element 78 creates additional UI elements for indexed properties..."), the device comprising:

a consumer application that publishes a feature interest indicating what features the said consumer application desires to have (see at least FIG. 1; see at least col. 10, lines 66-67 "The client process 18 produces a user-interface ("UI") 42 that is displayed to a user");

at least one provider application that has at least one feature available (see at least FIG. 1; see col. 10, line 6 "application 26") and

an application interworking framework that provides an interface for the said consumer application and the said provider application such that the said feature interest is matched with one of the features available from the said provider application (see at least FIG. 1, API 22).

As per claim 9:

Hayton further teaches

wherein the new consumer application is an application provided by a terminal manufacturer (see at least FIG. 1; see col. 10, line 1 "a server process 14").

As per claim 10:

Hayton further teaches

wherein the new consumer application is an application provided by a third party to a user of the device (see at least col. 8, lines 51-59 "a third party could generate a user-interface for published application...A third party could design a new client type without the server's involvement").

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As per claim 11:

Hayton further teaches

wherein the new consumer application integrates into the device as if part of an original group of software applications for the device (see at least col. 10, lines 66-67 "The client process 18 produces a user-interface ("UI") 42 that is displayed to a user").

As per claim 13:

Hayton further teaches

wherein the feature interest of the new consumer application comprises menu options not on the device before introduction of the new consumer application to the device (see at least col. 8, lines 22-23 "predefined element includes one or more of the following: a dropdown menu"; col. 21, lines 18-20 "A dropdown type is a nested dropdown menu, where each choice is a value from a range of indexed properties").

As per claim 14:

Hayton further teaches

wherein the user interface elements corresponding to the matched features are placed in the interest placeholders (see at least col. 11, lines 50-52 "API 22 maps each dynamic user-interface element 46 to a property 38 of an application component 34 using the associated property path").

As per claim 15:

Hayton further teaches

wherein the consumer application is a new consumer application (see at least col. 33, lines 36-38 "When the user clicks on a link, the client node 64 requests a new page 42' from the proxy process").

As per claim 19:

Hayton further teaches

wherein the consumer application obtains user interface elements from other providers (see at least col. 17, lines 38-39 "user requesting the page 42 associated with the application 26").

As per claim 20:

Hayton further teaches

wherein the client device is a mobile telephone (see at least col. 14, lines 56-58 "The client node 64 can be any computing device (e.g., a person computer, set top box, phone, handheld device, kiosk, etc)").

As per claim 21:

Hayton further teaches

provide a consumer application interest resource for a consumer application specifying at least one user interface element (see at least col. 11,

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lines 41-43 "the user initiates execution of the application 26 or request delivery of the page 42"; col. 17, lines 24-26 "...client node 64 requesting execution of the application 26 and/or in response to the client node 64 requesting the page 42...");

store user interface element corresponding to the consumer application interest resource in a file (see at least col. 16, lines 31-32 "The property browser can save the obtained results in the property file");

communicate said user interface element to an application interworking framework (see at least col. 2, lines 45-49 "user interface portion of the application can be delivered to the computer user either on the same machine on which the application is executing or on another machine remote from the machine executing the application"; col. 18, lines 57-60 "The server portion 22b transmits to the client portion 22a any change events associated with those property paths in which the client portion 22a has indicated interest"); and

add said user interface element to the consumer user interface (see at least col. 19:57-65 "A page 42 (*i.e. software application*) can also be altered dynamically when, for example, an iterator type predefined UI element 78 creates additional UI elements for indexed properties...").

As per claim 22:

Hayton further teaches

computer code to generate a class of generic parameters (see at least col. 15, lines 25-55).

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As per claim 23:

Hayton further teaches

computer code to pass arguments within the application interworking framework (see at least col. 11, lines 43-48 "when the computing device initiates execution of the property connector API 22, the computing device also receives a startup argument including the name of a file containing the UI page 42").

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hayton et al. (US 7,194,743 B2), in view of Gudmundson (WO 00/58855).

As per claim 4, Hayton does not explicitly teach:

wherein the application interworking framework interfaces the consumer application with the feature provider using dynamic link library (DLL) function calls.

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However, Gudmundson teaches:

wherein the application interworking framework interfaces the consumer application with the feature provider using dynamic link library (DLL) function calls (see at least page 9, lines 5-6 "The feature repository contains all the components required to enable a particular capability or feature (e.g., dynamic link library (DLL) files...").

Therefore, it would have been obvious to one having an ordinary skill in the art at the time the invention was made to recognize that the use of DLL is well known in the art and modify Hayton's approach to use a DLL to provide functions calls. One would have been motivated to modify because DLL provides one or more functions and the application calls the functions by creating dynamic link to the DLL.

Conclusion

14. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be

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calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phillip H. Nguyen whose telephone number is (571) 270-1070. The examiner can normally be reached on Monday - Thursday 10:00 AM - 3:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wei Y. Zhen can be reached on (571) 272-3708. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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7/27/2009.

/Wei Y Zhen/

Supervisory Patent Examiner, Art Unit 2191